Siddhartha Gorti (sgorti3), Andrew Tat (atat94) CSE 440 Winter 2016 Project Proposal

Tag: Social Media Organized

Vision

Tag is a social media aggregator for social media users and creators in following social media trends based on content type. Currently, there are a few alternatives that simply present all content surrounding a hashtag to the user such as Hashtagr and Tagboard. However, there is no way for users or creators to see content based on the type (i.e. text, images, or videos). Additionally, for some, there is no underlying analytics engine crunching through specific types of data to see what content type is driving the most engagement. Tag solves these problems by presenting hashtag content to the user in a compartmentalized user interface surrounding three content types: text, images, and videos. Behind the scenes, Tag then uses the data gathered from the content aggregation from multiple social media networks to generate reports and analytics around social media and engagement trends. These two features tackle the end, consumer-based user as well as the content creators and enterprise customers who are interested in data driven social media growth.

Software Architecture

Tag is first and foremost a mobile app. Content presentation based on type is the cornerstone of Tag. Tag's main functionality will revolve around searching for certain tags from various social media sources and separating them by content type. The user will have a chance to filter different media sources and content type and these filters will applied to search parameters. To achieve this, underlying Tag are a number of public APIs that are available for use. APIs of interest are Facebook, Twitter, Instagram, YouTube, The New York Times, and National Public Radio. These APIs will feed the required data to Tag, which will then parse through and find relevant content, categorize by type, and then present the results to the user. The presentation is also key, and Tag will rely on the rich gesture libraries that iOS and Android offer to developers. Android mobile development will take advantage of Android Studio and most of the programming will be done in Java. Objective-C along X-Code will be used in the development of the iOS application.

Challenges and Risks

We believe the single most serious challenge developing Tag is the learning curve. Learning mobile development well in a way that allows us to create a compact, functional, and beautiful user interface for Tag is the first hurdle. The second hurdle would be getting up to speed on all of the different APIs offered by different services both on schedule and in parallel. Because we will be using APIs from many potential sources, understanding how to efficiently use these APIs will be a significant time sink. The last challenge we might potentially face is how to use the content aggregation to assist enterprise customers who are interested in data driven social media growth. To mitigate the risk, we believe selecting only high quality APIs and having the team tag team the learning process will ensure thorough learning and efficient development.

UI Design Sketch



